

XXVIII.—*Description of a new Baboon.*

By Lord ROTHSCHILD, F.R.S.

*Maimon burlacei*, sp. n.

The species is somewhat intermediate between the drill and the mandrill, and justifies the removal of the drill from the genus *Papio* to that of *Maimon*.

♂ adult.—Differs from the mandrill in the pelage being darker and the annulation of the hairs less extended and fainter. The sides of the neck and beard much more rufous, not yellow, more as in very young individuals of the mandrill, not yellow as in adult mandrill. The long yellow chest-mane of the adult mandrill is absent. The hair on the buttocks is dark brown, not silvery grey. The dull olivaceous wash of the drill is absent.

*Skull*.—Differs from drill in the crests supporting the facial callosities not being constricted, but these crests are flatter in front than in the mandrill. The short palate and short rounded nasal foramina entirely resemble these parts in the drill. It also resembles the drill in the shorter, more rounded occipital area and the shorter occipital crest.

Length of skull from foramen magnum to base of incisors 157 mm.; zygomatic breadth 119 mm.; cheek-teeth 53 mm. Mandrill: length of skull from foramen magnum to base of incisors 177 mm.; zygomatic breadth 126 mm.; cheek-teeth 53.5 mm. Drill: length of skull from foramen magnum to base of incisors 156 mm.; zygomatic breadth 127 mm.; cheek-teeth 54 mm.

*Loc.* Bitye, Ja River, Camaroons (Rowland Ward Trustees).

Type in British Museum.

XXIX.—*Preliminary Note on the Affinities of the Genus Lipotes.* By MARTIN A. C. HINTON and W. P. PYCRAFT.

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IN 1918 Miller (Smithsonian Misc. Coll. lxxviii. no. 9) described a remarkable river-dolphin inhabiting the Tung Ting Lake, about 600 miles up the Yangtze River, China. Establishing a new genus and species—*Lipotes vexillifer*—for this creature,

Miller concluded, from the somewhat meagre material \* before him, that it had closer affinities with the South-American *Inia* than with any other living genus. This view has been accepted by Winge (Vidensk. Medd. fra Dansk naturh. Foren. lxx. p. 84, 1919), who refers both *Lipotes* and *Inia* together with *Pontistes*, *Pontoporia*, *Saurodelphis*, and *Platanista*, to the family Platanistidæ. As compared with *Inia*, *Lipotes* is, according to Winge, more primitive in having more slender teeth, and less primitive in having the facial fossa relatively wider behind.

The British Museum has just received from Dr. Skinner at Hankow a most valuable and important donation—namely, a female *Lipotes* and a male *Meomeris*, both in the flesh. We are now engaged in dissecting these specimens, and hope to publish a full account of our work before long. But since the dissection of *Lipotes*, so far as it has gone, has brought to light facts which seem to have an important bearing upon the relationships of that genus, it seems advisable to publish this preliminary note.

In its external form *Lipotes* presents a certain resemblance to the Gangetic dolphin, *Platanista*, though the neck is less evident than in the latter; the blow-hole is similarly longitudinal and sinistral in position; the eyes are very small, though less reduced than in *Platanista*; the dorsal fin has the same position, although it relatively is much larger, and the general form of the flippers is not unlike in the two genera.

In dissecting the blow-hole we have found that the spiracle is guarded by a pair of large floating bones placed one on each side of the subcutaneous narial slit, and forming together its posterior lip. The inner edges of these bones are embedded in the fibrous tissue surrounding the blow-hole. Each is provided with a double retractor muscle arising from the facial crest behind, and with a protractor muscle arising from the neighbourhood of the maxillary notch. The front end of each bone is closely connected with the fibrous pad forming the anterior valve of the blow-hole, and each protractor muscle sends fibres into the sides of that pad. On retraction the floating bones, which diverge anteriorly, and the front valve all move backwards together, their opposed edges coming into close contact and tightly closing the spiracle.

\* A skull with cervical vertebrae, a photograph of the animal in the flesh, and a description of its exterior drawn up by the collector, Mr. C. M. Hoy.

Two pairs of subcutaneous air-sacs are sent off from each side of the spiracle—an anterior pair dorsal to the floating bones, and a posterior pair ventral to those structures. There is marked asymmetry between the two sides in this region. On the left side the air-sacs and the floating bone are very materially smaller than on the right, while the posterior air-sac is wholly concealed beneath the inner portion of the bone. On the right side the posterior air-sac attains an enormous development; passing out from beneath the edge of the bone, it covers the whole surface of the *dilatator naris*, and in front it sends a diverticulum upwards over the dorsal surface of the bone, the end of the diverticulum actually abutting broadly against the outer wall of the anterior air-pouch. This dorsal diverticulum, although but a small part of the right posterior air-sac, has a much greater capacity than the whole pouch of the left side. In the respects described the right side appears to be much more highly modified than the left, so that we may say, perhaps, that *Lipotes* affords us two distinct stages of evolution simultaneously.

The floating bones, above described, may represent an early stage in the development of a bony facial mask, the extraordinary facial structure of *Platanista* then representing the culmination of such a process. By possessing even rudiments of such a structure *Lipotes* would be well on the way towards *Platanista*, and brought into closer relation with the latter genus than with any other. All the characters in which *Lipotes* resembles the South-American *Inia* are, perhaps, primitive features common probably to all the more primitive members of this group, and they, in all probability, were shared by the ancestors of *Platanista*.

The stomach, too, when compared with that of *Platanista*, is of very primitive form, the ventriculus being widely confluent with what represents the second compartment in *Platanista* and other dolphins. The stomach, therefore, may be described as being less completely segmented proximally than in most other genera, although towards the pylorus several small compartments are shut off as usual.

To sum up, we are inclined to believe that *Lipotes* is more closely related to *Platanista* than to any other known genus—a conclusion in harmony with its distribution,—and that it represents in many respects an early stage in the evolutionary processes which have led to the development of *Platanista*.